

CLAIMS

Claims 1-18 (Cancelled)

Claim 19 (Previously Presented) A display screen management apparatus for controlling a screen resource that is required to display a screen on a display, the display screen management apparatus comprising:

a screen information saving section including a memory for saving attribute information of the screen, the attribute information including a size of the screen and residence information indicating whether the screen is in a resident state or a non-resident state;

a screen resource saving section for saving the screen resource;

a screen control section for generating, using the attribute information of the screen saved in the screen information saving section, a screen resource to be used for generating a screen to be displayed on the display, and for saving the generated screen resource in the screen resource saving section;

an instruction section receiving an instruction to switch a screen currently displayed on the display to another screen; and

a screen discard determination section for determining whether or not to discard the screen resource of the currently displayed screen when the currently displayed screen is switched to the another screen,

wherein, when the instruction section receives the instruction to switch the screen currently displayed on the display to the another screen, the screen control section saves, in the screen information saving section, attribute information corresponding to the another screen and

saves, in the screen resource saving section, a screen resource of the another screen generated using the attribute information corresponding to the another screen,

wherein, when the screen discard determination section determines, based on attribute information of the currently displayed screen and the attribute information corresponding to the another screen, that (i) the currently displayed screen is completely hidden by the another screen, and (ii) the attribute information of the currently displayed screen indicates that the currently displayed screen is in the resident state indicating that the screen resource of the currently displayed screen is to invariably remain in a generated state, the screen control section displays, using the screen resource of the another screen, the another screen on the display without discarding the screen resource of the currently displayed screen from the screen resource saving section, and

wherein, when the screen discard determination section determines, based on the attribute information of the currently displayed screen and the attribute information corresponding to the another screen, that (iii) the currently displayed screen is completely hidden by the another screen, and (iv) the attribute information of the currently displayed screen indicates that the currently displayed screen is in the non-resident state, the screen control section displays, using the screen resource of the another screen, the another screen on the display and discards the screen resource of the currently displayed screen from the screen resource saving section.

Claim 20 (Previously Presented) The display screen management apparatus according to claim 19, wherein, when the attribute of the currently displayed screen does not indicate that the currently displayed screen is in the resident state, and when a display time, from when the another screen is displayed on the display to when the another screen is in a non-displayed state,

is shorter than a predetermined time, the screen discard determination section determines not to discard the screen resource of the currently displayed screen.

Claim 21 (Previously Presented) The display screen management apparatus according to claim 19, wherein, when it is determined that the currently displayed screen is completely hidden by the another screen and when it is determined that by causing at least a portion of the another screen to be transparent, the currently displayed screen is not hidden by the another screen, the screen discard determination section determines to display the another screen on the display without discarding the screen resource of the currently displayed screen.

Claim 22 (Previously Presented) A method performed by a display screen management apparatus for controlling a screen resource that is required to display a screen on a display, the display screen management apparatus including a screen information saving section for saving attribute information of the screen, the attribute information including a size of the screen and residence information indicating whether the screen is in a resident state or a non-resident state, and the display screen management apparatus including a screen resource saving section for saving the screen resource, the method comprising:

a screen control step of generating, using the attribute information of the screen saved in the screen information saving section, a screen resource to be used for generating a screen to be displayed on the display, and for saving the generated screen resource in the screen resource saving section;

an instruction step of inputting an instruction to switch a screen currently displayed on the display to another screen; and

a screen discard determination step of determining whether or not to discard the screen resource of the currently displayed screen when the currently displayed screen is switched to the another screen,

wherein, when the instruction step inputs the instruction to switch the screen currently displayed on the display to the another screen, the screen control step saves, in the screen information saving section, attribute information corresponding to the another screen and saves, in the screen resource saving section, a screen resource of the another screen generated using the attribute information corresponding to the another screen,

wherein, when the screen discard determination step determines, based on attribute information of the currently displayed screen and the attribute information corresponding to the another screen, that (i) the currently displayed screen is completely hidden by the another screen, and (ii) the attribute information of the currently displayed screen indicates that the currently displayed screen is in the resident state indicating that the screen resource of the currently displayed screen is to invariably remain in a generated state, the screen control step displays, using the screen resource of the another screen, the another screen on the display without discarding the screen resource of the currently displayed screen from the screen resource saving section, and

wherein, when the screen discard determination step determines, based on the attribute information of the currently displayed screen and the attribute information corresponding to the another screen, that (iii) the currently displayed screen is completely hidden by the another screen, and (iv) the attribute information of the currently displayed screen indicates that the currently displayed screen is in the non-resident state, the screen control step displays, using the

screen resource of the another screen, the another screen on the display, after discarding the screen resource of the currently displayed screen from the screen resource saving section.